



6.8BCD

Changes in Force and Motion

Picture Vocabulary

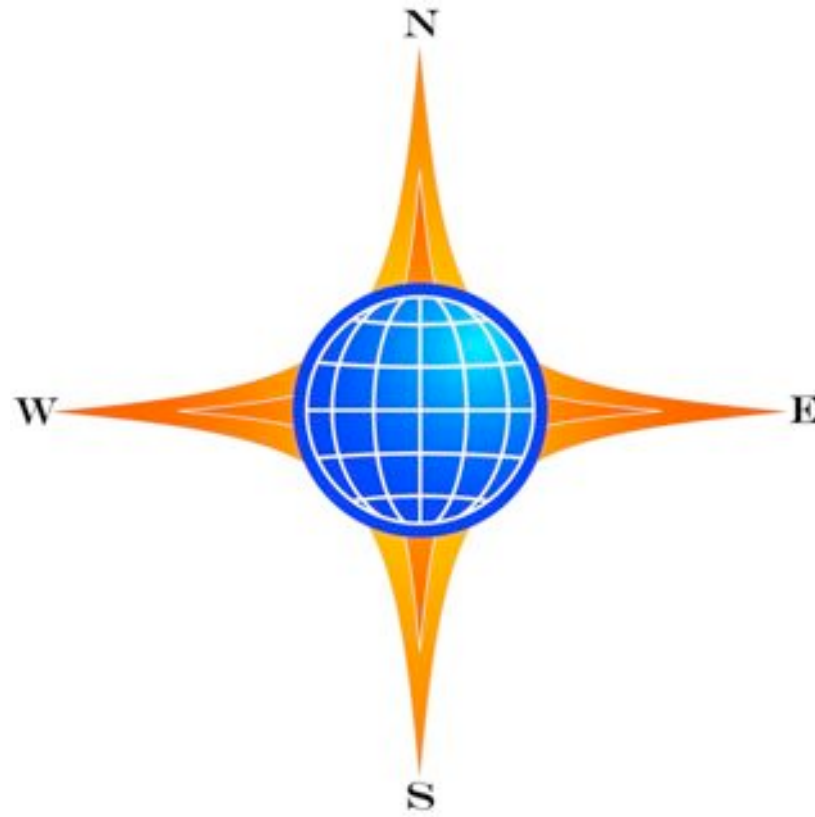


Position



The point or area occupied by a physical object

Direction



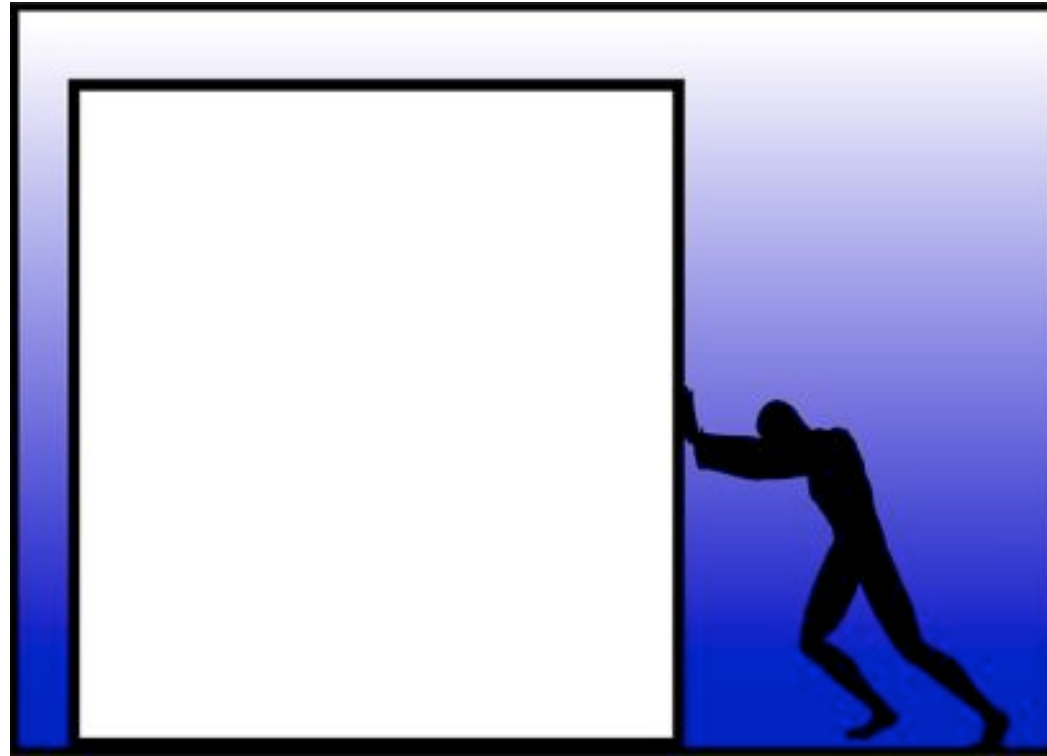
The path that an object is moving or facing

Speed



The measurement of the rate of change of position with respect to time

Force



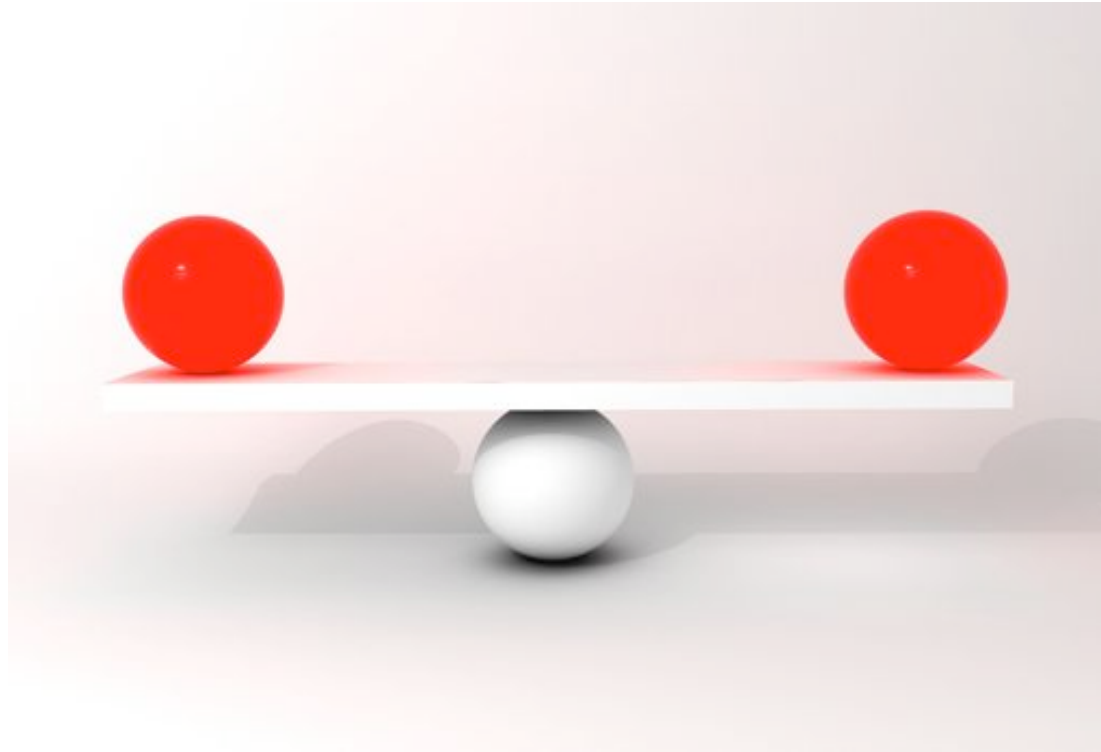
A push or pull that changes the motion or position of an object

Motion



A change in an object's position, direction, or location

Balanced Forces



Forces on an object that do not change the motion of the object

Unbalanced Forces

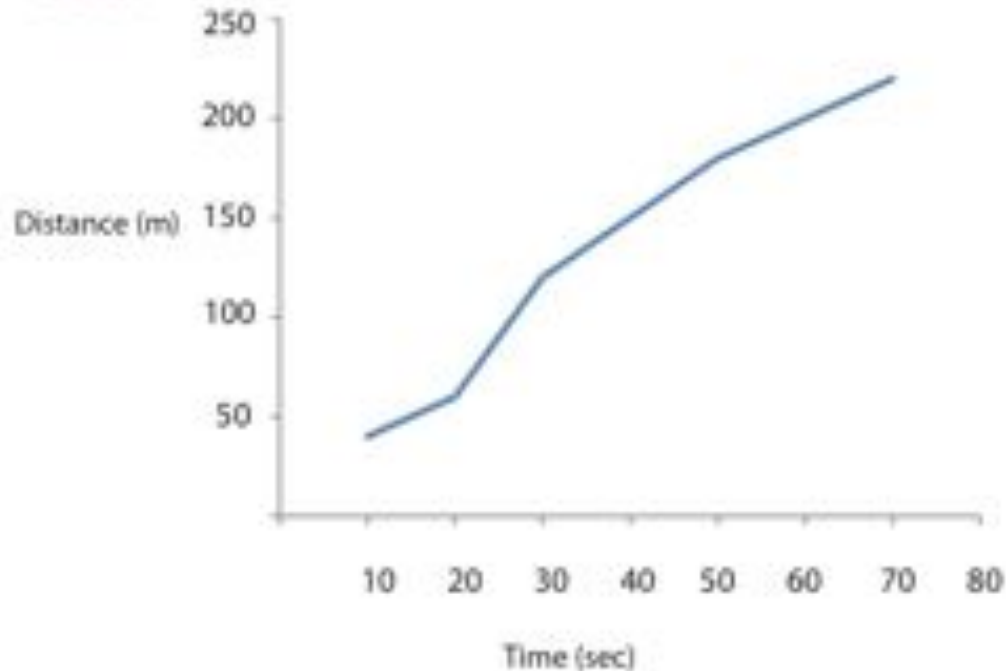


Forces on an object that cause change in the motion of the object

Average Speed

Average Speeds
 $= (200 - 150) / (60 - 40)$
 $= 2.5 \text{ m/s}$

Distance vs. Time



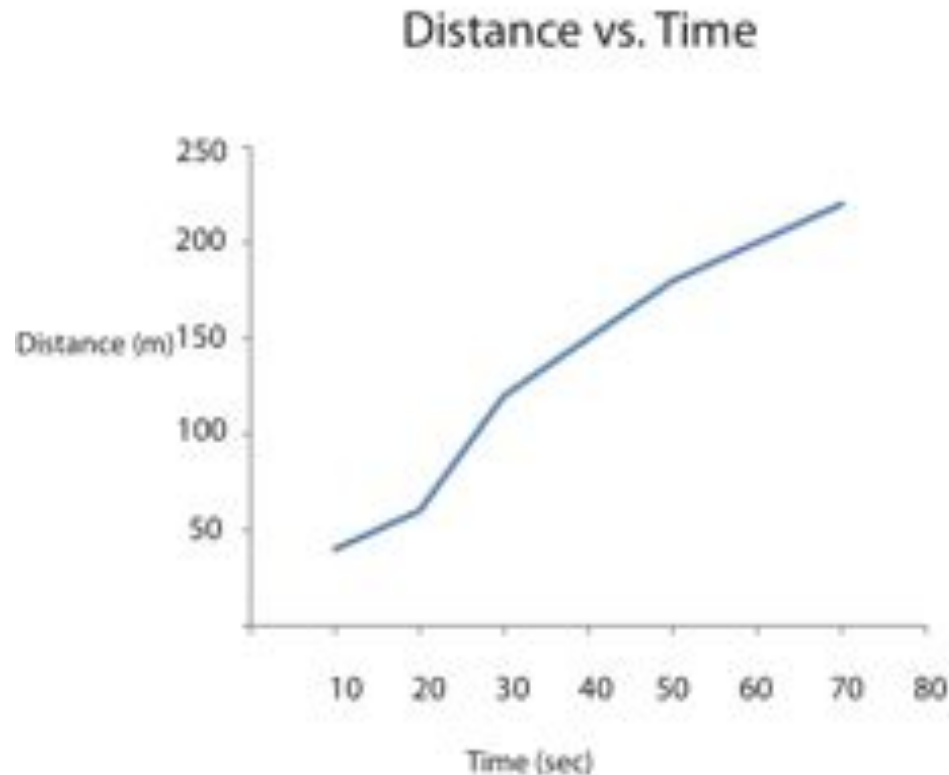
Average distance covered by an object per unit time

Line Graph



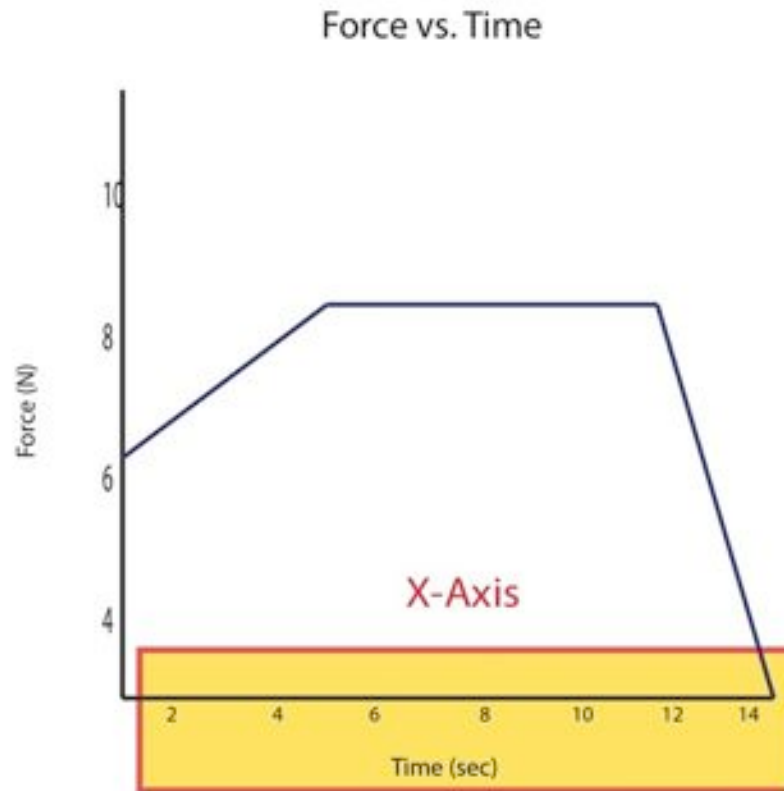
A graph in which the data are represented by points connected by one or more lines

Distance-Time Graph



A graph that represents distance traveled in increments of time

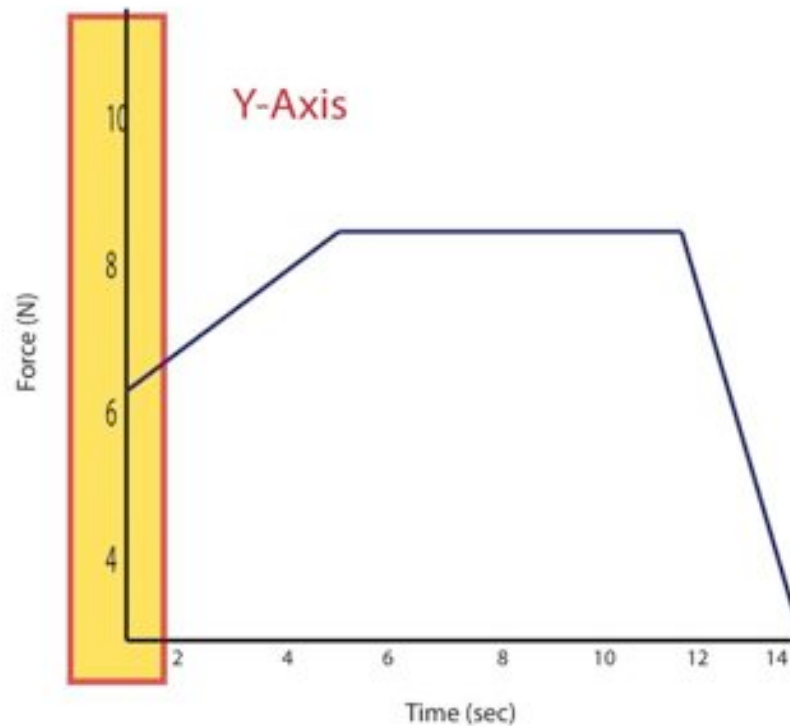
X-Axis



The horizontal line with labels on a coordinate grid

Y-Axis

Force vs. Time



The vertical line with labels on a coordinate grid

Meter



The basic SI unit of length

Second



The basic SI unit of time